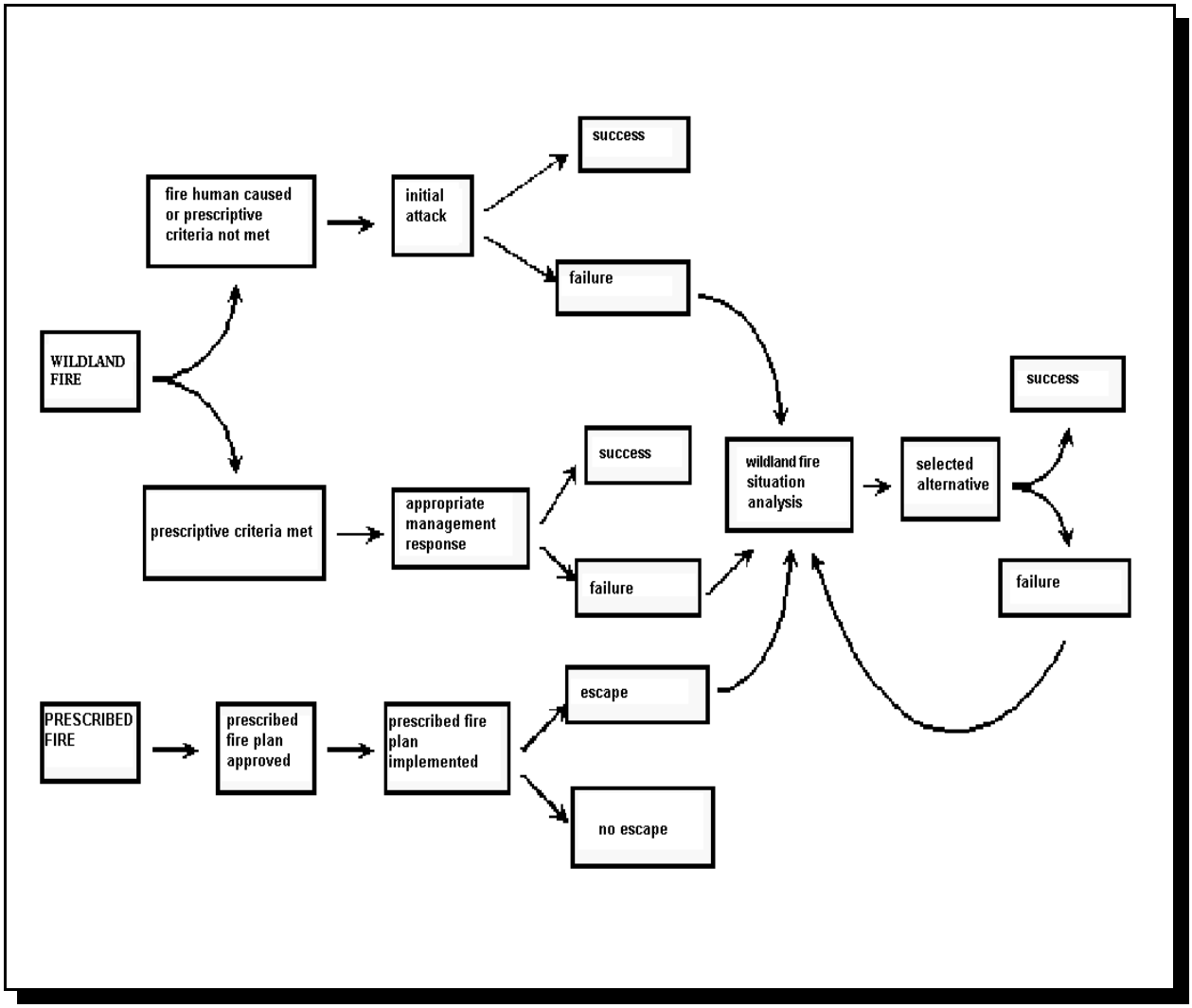
The flow chart (see Figure 5.1) represents how wildland fires and prescribed fires will be managed under the fire management plan.

Figure 5.1 - Management flow chart



Resource Advisors

The use of resource advisors (RA) is essential to adequately implement the FMP. Suppression crews may not be familiar with such things as; land uses, land management plans, resource concerns, local restrictions or access routes. The use of resource advisors allows management decisions to be made with full use of available information and local resource expertise. Not all wildland fire situations would require the on-site presence of a resource advisor. However, when management of an unplanned ignition may adversely or beneficially affect resources, the use of a resource advisor is warranted and necessary. Consult NFES # 1831 - Resource Advisor's Guide for Wildland Fire (1996).

Air Quality and Smoke Management

Air Quality and Smoke Management Directive: All prescribed fire and fire use activity shall conform to the state standard to minimize emissions using all available, practicable methods that are technologically feasible and economically reasonable in order to minimize the impact or reduce the potential for such impact on both the attainment and maintenance of national ambient air quality standards and achievement of federal and state visibility goals.

Prolonged exposure to smoke can cause significant health problems, especially with the elderly and young populations and for people suffering from respiratory illnesses. Smoke also adversely affects the clarity of our air which impairs our views. Therefore, predicting smoke dispersion and concentration is a major component of wildland fire management and prescribed burn plans. The current acceptable smoke model used is SASEM (Simple Approach Smoke Emission Model). The original intent of SASEM was for it to be used as a screening model for exceedances and visibility impairment. As more sophisticated models become available, they will be used for planning purposes within this FMP.

When BLM manages wildland fires for resource benefit and conducts prescribed fires, areas affected by the smoke must still meet air quality standards to protect public health. Despite the FMP's anticipated increases in prescriptive fire, clean air and public health goals can be met through careful planning and cooperation among land managers, air quality regulators and local communities.

Fire managers realize that suppressing all wildland fires with no preventative fuels treatments would improve air quality in the short term. However, preventing periodic fires has already contributed to unacceptable fuel loadings in many areas, which has increased the risk of larger, more intense wildland fires burning for longer periods. Large uncontrolled wildland fires typically cause greater air pollutant emission levels and more widespread air quality impacts.

The key to successfully balancing prescriptive fire and meeting air quality standards is a smoke management program. The FMP allows proactive management flexibility to control smoke production and impacts in smoke-sensitive areas. In addition, mitigation measures have been built into the FMP to reduce potential negative impacts from smoke pollution. First and foremost, air quality is considered in the Prescriptive Criteria of the "Go/No Go Checklist" (see Appendix C, Figure B.2) to determine the viability of implementing a prescriptive fire treatment. If the established federal and state standards for air quality cannot be met or mitigated in an acceptable manner, the project will not be implemented until conditions change. The Go/No Go Checklist is evaluated on a daily basis.

Secondly, even when these standards are met, the FMP also identifies smoke management techniques and procedures to mitigate the potential impacts of smoke. Application of these techniques will minimize air quality impacts (seeing, smelling, breathing). The techniques are described in the Prescribed Fire Smoke Management Guide, published by the National Wildfire Coordinating Group (NFES No. 1279, PMS 420-1; 1985). Examples of smoke management techniques and procedures include:

1. Authorization to Burn

    - Consultation and approval by the State of Colorado is a continuing process. Interagency fire managers will cooperate with other land managers and the State of Colorado to minimize air quality impacts from smoke. The BLM will obtain all necessary air pollutant emission permits and approvals from the State of Colorado prior to initiating a prescriptive fire. The agency will follow and implement the terms of the Colorado Air Quality Control Commission Regulation No. 9 and the Interagency Colorado Smoke Management Plan and MOU as well as any site-specific open burning permit.

2. Actions to Minimize Emissions and Enhance Dispersion

    - Each prescriptive fire has unique characteristics, but in general, smoke impacts can be greatly minimized by burning during weather conditions that provide optimal dispersion and wind conditions for the types of materials being burned.

    - Smoke impacts minimized by limiting the amount of materials and acreage burned at one time.

    - Whenever feasible and necessary, mechanical thinning (such as selective timber thinning, pruning or cutting of small trees) used as a “pretreatment” to prescriptive burning.

    - Burning with higher intensities when possible which provides for more convection and greater dispersion of smoke.

3. Modeling

    - Interagency fire managers assess potential air quality impacts through the use of smoke dispersion modeling techniques (e.g.; SASEM, etc.) to predict particulate matter emissions, smoke plume characteristics, exposure and visibility impacts.

4. Monitoring

    - Once a prescriptive fire is initiated, the agency monitors weather, burning and smoke dispersion conditions to assure air quality impacts remain within prescribed smoke management levels. If monitoring indicates conditions are no longer within prescription, managers stop the prescriptive treatment or declare the fire an unwanted wildland fire and initiate the Appropriate Management Response.

    - Personnel stationed along roadways to visually monitor for smoke impacts and warn motorists of adverse conditions.

    - The field personnel maintain communications with the dispatch offices. The dispatch office acts as a clearinghouse, providing and maintaining daily information on burning projects throughout the region.

    - Particulate monitors used as a monitoring tool at sensitive receptors.

5. Public Notification and Awareness

    - Interagency fire managers inform the general public of the status of wildland fires, prescribed burns and smoke through local press, radio and television.

    - Interagency fire managers establish and maintain close communications with State and local agencies regarding the status of prescriptive fire treatments and wildland fires. When necessary managers notify concerned smoke-sensitive organizations (i.e. hospitals, schools, retirement centers) of management intentions and burning conditions.

    - Implementing fire hazard awareness and mitigation programs for the public.